

OPTICAL TO MICROWAVE CONVERTER USING  
DIRECT MODULATION PHASE SHIFT KEYING

ABSTRACT OF THE DISCLOSURE

A point-to-point microwave radio link that operates in a Frequency Division  
5 Duplex (FDD) mode using direct digital modulation with a Continuous Phase Shift  
Keyed (PSK) scheme. The transmit signal is generated by a circuit that uses a Voltage-  
Control Oscillator (VCO) operating in a microwave radio band to obtain the modulated  
signal. The VCO output is fed to a phase modulator to obtain the modulated signal.  
The output of the VCO is then frequency multiplied by the predetermined factor to  
10 produce the modulated microwave output signal at the desired band.